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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
SEFCHECK, GREGORY B	

ART UNIT	PAPER NUMBER
2419	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/533,957	Applicant(s) ISLAM ET AL.	
	Examiner GREGORY B. SEFCHECK	Art Unit 2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 May 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- Applicant's Amendment filed 2/25/2009 is acknowledged.
- Claims 5 and 9 have been amended.
- Claims 1-10 remain pending.

Drawings

1. The drawings are objected to because Figure 8 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 1, 2, 4, and 10 are objected to because of the following informalities: The use of element numbers in () should be deleted from the claims. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper (US20030129979) in view of Khare et al. (US20020065067), hereafter Khare.

- Regarding claim 1,

Cooper discloses a mobile device capable of supporting packet data services and voice services (Para. 24 discloses mobile device services for telephone, computer, PDA, navigation system, thus illustrating both voice and data services) offered by wireless networks comprising a memory and transceiver (Para. 10; Fig. 2) for exchanging packet data service authentication information with the wireless networks (Para. 6-7; Fig. 2; Fig. 4, 170).

Cooper further discloses a packet data services blacklist provided in the memory, the packet data services blacklist identifying wireless networks that do not provide packet data services to the mobile device, the packet data services blacklist being based on previous packet data service authentication rejections (Para. 25-26).

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Cooper also discloses a processor (processing circuitry; Para. 10) for updating the packet data services blacklist in response to newly received packet data service authentication information (Fig. 4, 180 and 190;).

Cooper discloses the desirability of each system may be determined using criteria such as the quality of the service offered and support for unique features (Para. 29) and also discloses that the acquisition table and avoidance table includes entries for mode, band, and frequency to be avoided during future system acquisition attempts of the corresponding system (Para. 31). However, Cooper does not explicitly disclose a packet data services blacklist distinct from a voice services blacklist.

Khare discloses a method for determining whether data service connectivity is supported in a wireless system (Title) based on a rejection reply to a call origination by the mobile device requesting data service (Abstract; Para. 35; 42). Khare discloses determination of connectivity of different data service options separate from voice service availability (Para. 22-23, 42).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cooper by providing connectivity determination for packet data services distinct from voice services, as shown by Khare. This would enable the mobile device of Cooper to differentiate system avoidance based on specific services, thereby providing dynamic service connectivity within the various available systems.

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- Regarding claims 4 and 5,

Cooper discloses a method of data service discovery for a mobile device having a packet data services blacklist comprising detecting a wireless network and examining the packet data services blacklist stored on the mobile device (Para. 26).

Cooper further discloses that, if the detected wireless network is listed in the packet data services blacklist, refraining from making any packet data call attempts for a predetermined period of time (Para. 12, 31-34), and adding the wireless network to the packet data services blacklist if the wireless network does not provide packet data services to the mobile device (Para. 26, 33).

Cooper discloses the desirability of each system may be determined using criteria such as the quality of the service offered and support for unique features (Para. 29) and also discloses that the acquisition table and avoidance table includes entries for mode, band, and frequency to be avoided during future system acquisition attempts of the corresponding system (Para. 31). However, Cooper does not explicitly disclose determining whether the wireless network specifically provides packet data services to the mobile device distinct from voice services.

Khare discloses a method for determining whether data service connectivity is supported in a wireless system (Title) based on a rejection reply to a call origination by the mobile device requesting data service (Abstract; Para. 35; 42). Khare discloses determination of connectivity of different data service options separate from voice service availability (Para. 22-23, 42). Khare further discloses initially (upon power up

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and/or when a change in SID/NID occurs) determining whether the wireless network supports data service (Para 46).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cooper by providing connectivity determination for packet data services distinct from voice services, as shown by Khare. This would enable the mobile device of Cooper to differentiate system avoidance based on specific services, thereby providing dynamic service connectivity within the various available systems.

- Regarding claim 6,

Cooper further discloses authenticating the mobile device on the wireless network (Para. 29 discloses that the desirability of a system to be acquired/registered by a mobile device includes determining whether the mobile device is a subscriber of the system).

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper in view of Khare as applied to claim 1 above, and further in view of Daly (US00612503).

- Regarding claim 2,

Cooper discloses the packet data services blacklist includes a system identifier and network identifier for each wireless network not providing packet data services to the mobile device (Para. 31), a timer value and age timer (Avoidance_Time, Avoidance_Duration; Para. 31-35).

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Cooper does not explicitly disclose a flag indicating whether an identification of a blacklisted wireless network has been passed to a server.

However, Daly discloses a flag (status indicator) which may be used to indicate that blacklisted wireless network has been passed to a server (Column 4, lines 34-41).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cooper with a flag to indicate that blacklisted wireless network has been passed to a server, as shown by Daly, thereby aiding database synchronization within the system.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper in view of Khare as applied to claim 1 above, and further in view of Yasushi et al. (US20020046285), hereafter Yasushi.

- Regarding claim 3,

Cooper does not explicitly disclose packet data services blacklist includes a composite packet data services blacklist received from a server.

Yasushi discloses a method to maintain a composite list which is based on data sent to the server from mobile device to update the database (Paragraphs 0008- 0009).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cooper by maintaining a composite list which is based on data sent to the server from mobile device to update the database, as shown by Yasushi. This would maintain consistency throughout the network of the up-to-date service availability of the various access systems available to the mobile devices.

7. Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper in view of Khare as applied to claim 4 above, and further in view of Yasushi and Daly.

- Regarding claim 7,

Cooper discloses starting an age timer (Avoidance_Duration) associated with a wireless network that is added to the packet data services blacklist and clearing an age timer associated with a wireless network in response to satisfaction of a reset condition (Para. 33).

Cooper does not explicitly disclose notifying a server of a newly blacklisted wireless network.

Yasushi discloses a method to maintain a composite list which is based on data sent (notified) to the server from mobile device to update the database (Paragraphs 0008- 0009).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cooper by maintaining a composite list which is based on data sent

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to the server from mobile device to update the database, as shown by Yasushi. This would maintain consistency throughout the network of the up-to-date service availability of the various access systems available to the mobile devices.

Cooper does not explicitly disclose receiving a composite packet data services blacklist from a server.

Daly discloses a method which allows a database to be sent from a server to a mobile device to update the mobile's database (Col. 4, lines 4-13).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cooper by receiving a composite packet data services blacklist from a server, as shown by Daly, thereby allowing a mobile device to maintain a consistent, up-to-date and synchronized blacklist with that of the various access systems throughout the network.

- Regarding claim 9,

Cooper does not disclose sending a notification to a server if a mobile device finds a wireless network which was not previously providing packet data services to the mobile device and is now providing packet data services to the mobile device.

Yasushi discloses updating the database in a server with the update condition received from various mobile units (Para. 8).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cooper by maintaining a composite list which is based on data sent to the server from mobile device to update the database, as shown by Yasushi. This

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would maintain consistency throughout the network of the up-to-date service availability of the various access systems available to the mobile devices.

Cooper does not explicitly disclose sending a notification from the server to other mobile devices to clear the entry of a wireless network which was previously not providing packet data services but currently is providing packet data services.

Daly discloses a method which allows a database to be sent from a server to a mobile device to update the mobile's database (Col. 4, lines 4-13).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cooper by receiving a composite packet data services blacklist from a server, as shown by Daly, thereby allowing a mobile device to maintain a consistent, up-to-date and synchronized blacklist with that of the various access systems throughout the network.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper in view of Khare and further in view of Marran (US 6549770).

- Regarding claim 8,

Cooper does not explicitly disclose clearing the packet data services blacklist in response to a provisioning reset condition.

Marran discloses updating or correcting data stored in a mobile station under various conditions (Column 4, line 15-65; Column 5, line 1-50; Column 8, lines 30-50; Column 11, lines 10-45).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cooper by clearing the blacklist in response to a provisioning reset condition, as shown by Marran, thereby enabling the database to be repaired in response to failure at the mobile.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann et al. (US 5642398), hereafter Tiedemann, in view of Daly.

- Regarding claim 10,

Tiedemann discloses a method of packet data service notification in a wireless network, the wireless network including a server and a mobile device (Column 8 Lines 3-16), the method comprising: receiving at the server a registration of a newly powered-up mobile device (Column 10 Lines 24-30).

Tiedemann et al further teach about sending system, network, and zone information to facilitate mobile station operation across multiple systems and networks (Column 10, lines 55-67), but Tiedemann does not explicitly disclose retrieving server-stored information regarding packet data services distinct from voice services and sending the server-stored packet data services information to a newly powered-up mobile device for reception by and storage on the mobile device.

Daly teaches sending network information from server to mobile station regarding voice and data communication channels to update the database within the mobile station which is used to control the roaming operation (Column 4, lines 4-13).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tiedemann by retrieving server-stored information regarding packet data services distinct from voice services and sending the server-stored packet data services information to a newly powered-up mobile device for reception by and storage on the mobile device, as shown by Daly. The motivation for this modification would be to allow a mobile device to receive the packet data services information from the server at the time of power-up registration to facilitate and control roaming operation across multiple systems and networks.

Response to Arguments

10. Applicant's arguments filed 2/25/2009 have been fully considered but they are not persuasive.

- In the Remarks on pg. 6-8 of the Amendment, Applicant contends that Cooper and Khare do not properly reject claims 1 and 4-6. Specifically, Applicant alleges that Khare does not provide that which Cooper lacks, a blacklist identifying networks that do not specifically provide packet data services to the mobile device. Applicant argues that Khare's disclosure refers to **service options** which specify service capabilities of a mobile system rather than capabilities of packet data services to the mobile (emphases by Applicant).

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- The Examiner respectfully disagrees. Firstly, it is noted that the claim rejection are based upon the combination of Cooper and Khare rather than either reference considered alone. As such, Cooper is relied upon to disclose a blacklist to store information relating to network that do not provide services to the mobile device. Further, the information in the blacklist is shown to be based upon authentication rejections (Cooper's cited disclosure of system avoidance based upon unsuccessful registration as well as Cooper's disclosure of system desirability based upon whether the mobile is a subscriber of the system). Khare is only relied upon to illustrate an explicit differentiation between voice and data services, which is shown in the cited disclosure of Khare. Thus, the combination of Cooper and Khare properly rejects the claims.

- Applicant's further arguments on pg. 8 relating to a system capable of offering data services in general versus a system capable of offering data to a particular mobile device, as well as arguments concerning two different levels of authentication having different purposes, are moot as these aspects are not explicit limitations of the claims. Regardless, Cooper differentiates between systems that are capable of providing service to the network, in general, as well as providing service to particular mobiles, based upon whether the mobile is a subscriber of the system (Cooper, para. 29).

- In the Remarks on pg. 9 of the Amendment, Applicant contends that Khare does not differentiate between voice and data service as claimed, stating that the data service availability indication in Khare is provided as part of a database listing available SID/NID pairs . Thus, without a separate data services blacklist, Khare can only list the data service availability of a wireless network for which voice services are provided based on listing in either a preferred roaming list or blacklist for voice services. Furthermore, Applicant contests the motivation for combining Cooper and Khare in disclosing a distinction between the capability for a requested service and providing the requested service to a mobile.
- The Examiner respectfully disagrees. Firstly, it is noted that the claims are rejected based on the combination of Cooper and Khare rather than on Khare alone. Contrary to Applicant's assertions, Cooper discloses the distinction between the capability for a requested service and providing of the requested service, since Cooper shows that systems not listed in the avoidance list still must be successfully acquire/register with the system in order to receive service. Further, the rejection shows that Cooper discloses a preferred roaming list including a systems table that lists the NID/SID and other acquisition parameters of each **known** system (not only those systems for which voice service is provided, as alleged by Applicant) and grouping/ranking the systems by desirability based on

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characteristics particular to each mobile device (cell phone, laptop, PDA, etc.) including whether the mobile is a subscriber of a particular system.

Cooper also includes the acquisition parameters of each system, including band, frequency and mode, in the Avoidance list. Thus, Cooper is implicit that the disclosed “wireless services” of a system may contain both voice and data services based on the type of wireless device considered.

However, as admitted in the rejection, Cooper is not explicit regarding the availability of data services, specifically. Therefore, the rejection relies on Khare to explicitly disclose availability determination of data services, separate from other services such as voice, and indicating availability of data service to the mobile device. Thus, the combination of Khare and Cooper is properly motivated in rejecting the pending claims.

- Applicant's arguments on pg. 10 of the Amendment contends that the further cited prior art in the rejections of claims 2, 3, and 7-9 do not disclose that which Cooper and Khare have been alleged to lack.
- As shown above, the rejections based upon Cooper and Khare properly meet the contested claim limitations. Applicant does not provide separate arguments against Daly, Yasushi, or Marran. Therefore, those rejections are properly maintained.

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- In the Remarks on pg. 11 of the Amendment, Applicant contends the combination of Tiedemann and Daly does not disclose a packet data services blacklist distinct from a voice services blacklist.
- The Examiner respectfully disagrees. Tiedemann discloses server registration of a mobile in order to provide information regarding which of multiple systems and networks may or may not be used for communication based on the telephone number, addresses and classification of the mobile. It is admitted in the rejection that Tiedemann does not explicitly disclose retrieving information regarding packet data services distinct from information regarding voice services information. However, Daly discloses automatically retrieving information from a central database regarding service information for managing intelligent roaming operations, including information on communication channels used for carrying voice or data. Thus, the combination of Tiedemann and Daly properly rejects the claim.

Conclusion

11. The prior art made of record on the attached PTO-892 form and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREGORY B. SEFCHECK whose telephone number is

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(571)272-3098. The examiner can normally be reached on Monday-Friday, 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chirag Shah can be reached on 571-272-3144. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory B Sefcheck/
Primary Examiner, Art Unit 2419
5-5-2009